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Worldwide Report

EPIDEMIOLOGY

No. 232



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CONTENTS

HUMAN DISEASES

ARGENTINA

Briefs

Diphtheria Cases	1
Cases of Hepatitis	1

BOLIVIA

Briefs

Tuberculosis Death Rate	2
Deaths From Yellow Fever	2

CENTRAL AFRICAN REPUBLIC

Marburg Virus Affects Some Inhabitants (Gabriel Smirnow; LA OPINION, 24 Mar 81)	3
--	---

COTE D'IVOIRE

Measles Vaccination Campaign (A. Batantou; MWETI, 14 Apr 81)	5
---	---

CYPRUS

Measures Against Thalassemia Announced (KHARAVGI, 9 Apr 81)	7
--	---

GUYANA

Briefs

Mosquito Spraying	9
-------------------	---

INDIA

Paper Reports on Kala-Azar Fatalities (THE HINDU, 25 Apr 81)	10
Lok Sabha Discussion Deaths in Bihar	
Malaria Eradication Program Reportedly Fails (THE HINDU, 25 Apr 81)	12
Conference Plans Regional Eradication of Malaria (THE STATESMAN, 28 Apr 81)	13
Briefs Kala-Azar Deaths	14

ISRAEL

Briefs Leprosy Death	15
-------------------------	----

MOZAMBIQUE

Briefs Vaccination Figures	16
-------------------------------	----

PEOPLES'S REPUBLIC OF CHINA

Target Date for Eradication of Leprosy Planned (SOUTH CHINA MORNING POST, 23 Apr 81).....	17
New Rabies Vaccine Proven (Huo Bailin; SOUTH CHINA MORNING POST, 22 Apr 81).....	18
Briefs New Weapons Fight Meningitis	20

SRI LANKA

Briefs Cholera Death in Nursing Home	21
---	----

SWAZILAND

TB Control, Research Advance Reported (THE TIMES OF SWAZILAND, 1 May 81)	22
---	----

TANZANIA

Briefs Measles Outbreak	23
----------------------------	----

TRINIDAD AND TOBAGO

Briefs	
Gastroenteritis Project	24

ZAIRE

Marketing of Counterfeit Penicillin Reported (Yav Mwiri-Nem; NJUNBE: LE QUOTIDIEN DU SHABA, various dates)	25
Briefs	
Rabies Outbreak	30

ANIMAL DISEASES

BOTSWANA

Minister Claims Success of Battle Against Foot-and-Mouth (DAILY NEWS, 21 Apr 81)	31
---	----

BULGARIA

Case of Pasteurellosis Described (B. Vachev, et al.; VETERINARNA SBIRKA, No 1, 1981)	33
---	----

CHILE

Brazilian Intestinal Virus Attacks Dog Population (EL MERCURIO, 25 Feb 81)	36
---	----

DENMARK

Authorities Raise Level of Ochratoxin Allowed in Pork (Leif Hansen; INFORMATION, 2 Apr 81)	38
---	----

INDIA

Briefs	
Rinderpest Deaths	41

MOZAMBIQUE

Preventive Vaccination Campaign Against Carbuncle (NOTICIAS DA BEIRA, 18 Apr 81)	42
---	----

NEW ZEALAND

Local Firm Develops Leptospirosis Vaccine for Cattle (THE PRESS, 29 Apr 81)	43
--	----

Briefs	Facial Eczema Outbreak	44
PARAGUAY		
Briefs	Foot-and-Mouth Outbreak	45
PLANT DISEASES AND INSECT PESTS		
INDIA		
	Fungal Disease Reported Threatening Gram Crop (THE TIMES OF INDIA, 27 Apr 81)	46
MALAYSIA		
	Outbreak of Cocoa Disease Causes Concern (BUSINESS TIMES, 4 Apr 81)	47
NEW ZEALAND		
	New Rust Disease Has Little Effect on Wheat Yields (THE PRESS, 10 Apr 81)	48
SWAZILAND		
	Meeting of Red Locust Control Organization Reported (THE TIMES OF SWAZILAND, 30 Apr 81)	49
VENEZUELA		
	Campaign Waged Against Cacao Plantation Blight (Boaneg Pernia Ramirez; EL UNIVERSAL, 16 Mar 81)	50

BRIEFS

DIPHTHERIA CASES--(NA)--Five cases of diphtheria have been reported in the Barrio Zavaleta District in this city, according to a municipality press release yesterday. The five, who have been admitted to Muniz Hospital, are schoolchildren who all belong to the same family. As a control measure, city hall personnel has vaccinated 1,062 people in that same district. [Text] [Buenos Aires HERALD in English 7 May 81 p 9]

CASES OF HEPATITIS--Rosario, 4 May (TELAM)--The Rosario health department has reported that two teachers and five students of a downtown Rosario school have been found to be suffering from mild cases of hepatitis. [Buenos Aires TELAM in Spanish 1140 GMT 4 May 81]

CSO: 5400/2123

BOLIVIA

BRIEFS

TUBERCULOSIS DEATH RATE--La Paz, 24 Apr (AFP)--Fernando Pinell, director of the National Tuberculosis Service has reported that the average death rate due to tuberculosis is currently 47 for every 100,000 inhabitants. Pinnel reported that a significant decline of the death rate due to this disease has been taking place in recent years. [Paris AFP in Spanish 1856 GMT 24 Apr 81]

DEATHS FROM YELLOW FEVER--La Paz, 25 Apr (TELAM)--The commander of the second naval district headquartered in Trinidad has reported that two sailors have died as a result of the yellow fever outbreak in Beni, 1,500 km from La Paz. [Buenos Aires TELAM in Spanish 0455 GMT 25 Apr 81]

CSO: 5400/2123

MARBURG VIRUS AFFECTS SOME INHABITANTS

Buenos Aires LA OPINION in Spanish 24 Mar 81 p 5

[Article by Gabriel Smirnow]

[Text] Paris (AFP)--A deadly virus capable of triggering staggering and destructive epidemics on a worldwide scale was discovered in the latent state among certain ethnic groups on the African continent, according to a recent announcement by Prof Francois Gros, director of the Pasteur Institute in Paris.

As a matter of fact, the frightful Marburg virus, which is responsible for an extremely contagious fever often fatal to man and which is also known by the name of "the green monkey disease," has just been detected in seemingly healthy individuals in Bangui, capital of the Central African Republic, by a team from the Pasteur Institute.

Those persons, who are apparently immunized naturally against the disease, are carrying a hidden virus within their bodies which could at any moment be reactivated upon transmission to other human beings in a favorable microbial environment.

In that way, the Marburg virus, which is considered one of the three most dangerous viruses in the world because of the quickness of its fatal action, is compared to a sword of Damocles or a time bomb by research doctors, as there is no vaccine to prevent its propagation.

Although this is a little-known and inadequately studied virus--its handling requires safety conditions as draconian as radioactive substances--it is known, unfortunately, that it can be transmitted in various ways.

During research conducted in the FRG, specifically as the result of a violent epidemic in a Frankfurt laboratory, it was proved that the Marburg virus can be transmitted by transcutaneous infection, contamination via the respiratory tract or the conjunctivas and, finally, through sexual contact.

On that occasion, practically all the laboratory personnel were infected by green monkeys brought into the country from Uganda for experimental purposes. One-third of those affected died quickly in spite of all efforts to save them.

Clinically, the infection is characterized by high fever, accompanied by heavy hemorrhaging, and by an amazing predisposition to contagion.

Two African regions, the southern part of Sudan and the northern part of Zaire, were scourged simultaneously in 1976 by a variety of the Marburg virus, with hundreds of deaths.

Later, other beginnings of epidemics were reported, almost all in the western regions of Black Africa, but with less tragic results.

The recent discovery announced by Professor Gros is now complicating a situation which was already extraordinarily threatening.

In fact, serological research conducted in M'Boma Department, southwest of the Central African Republic, revealed that 14 out of every 1,000 inhabitants surveyed, seemingly healthy, were carriers of the Marburg virus.

Consequently, unless all persons coming from Africa are subjected to an adequate test upon their arrival on other continents, it would be very difficult to prevent individuals contaminated with latent viruses from spreading the frightful disease at any time and in a totally unexpected way.

8143

CSO: 3400/3106

MEASLES VACCINATION CAMPAIGN

Brazzaville MWETI in French 14 Apr 81 p 3

[Article by A. Batantou: "Sanitation Measures for the City and Campaign Against Measles"]

[Text] City cleanliness and the vaccination, on this coming 26 April, of approximately 3,000 children from 6-12 months of age with the help of the Lions Club of Pointe-Noire were the subject of an urgent meeting on Thursday, 9 April, at the Ottino Hotel under the chairmanship of the regional political commissioner, comrade Ngouonimba Nczari.

The following participated in that meeting: the director of the Adolphe Sice hospital; the regional director of Social Affairs; the head doctor for the Health Services of Kouilou; the regional and communal board members of public organizations; party members of the commune of Pointe-Noire and of the region of Kouilou.

The first item of business consisted of taking stock of the means to give Pointe-Noire a much finer appearance consistent with its present economic resources. The regional political commissioner insisted that the actions to be taken in this connection be carried out in a manner contrary to the usual manner.

The second item of business kept the participants longer at that meeting. Because measles now kill about 200 out of a thousand persons, it was decided that urgent measures should be taken. The regional political commissioner recalled the almost alarming situation noted at the Adolphe Sice hospital when he made a recent visit to ask everyone to participate in the vaccination campaign that the Lions Club of Pointe-Noire is organizing for next 26 April.

Citing the example of some analogous operations last year and which ended almost in failure, comrade Ngouonimba-Nczari made a strong request that all those in charge of staffs at all levels bring this project to a successful conclusion this time.

It is absolutely unthinkable, he said, for such a high mortality rate to continue when considerable means are often available to the population.

Since the people lack information, as seemed to be apparent in the room, the participants at that meeting pledged, each in proportion to his portion of political or administrative responsibilities, to sensitize the maximum number of parents with respect to this occurrence.

For example, a mobile radio could be put in circulation as soon as possible by the municipal services in order to inform the people, while public organizations and party cells and nuclei at all levels would repeat the order for mobilization within their respective units.

The 26th day of April, if the date is not postponed, should be a memorable day for the protection of the life of at least 3,000 children, along with many others, who are threatened with measles.

8255

CSO: 5400/5137

MEASURES AGAINST THALASSEMIA ANNOUNCED

Nicosia KINAVOSI in Greek 9 Apr 81 p 7

[Text] The opening ceremonies for the Anti-Anemia Center took place yesterday afternoon in Nicosia, with the president of the Republic, the archbishop, and other officials present.

In his salutatory address, President Kyprianou said, among other things, that "we will make every effort to use this center fully in what concerns the prevention as well as the treatment of Mediterranean anemia [thalassaemia], which for many years has been a scourge for our country."

Mr Kyprianou also gave assurances that the State will do everything in its power in the sector of health by raising the level of its contribution to the highest possible degree.

P. Englezos, chairman of the Pan-Cypriot Anti-anemia Association, stressed in his address that this center will constitute the principal agency for dealing with thalassaemia, given the professional personnel as well as the requisite mechanical equipment which it has.

The speaker stated his conviction that the matter of the prevention of this disease is on the way to a solution, through an identifying of all the carriers of the hereditary defect by the center's laboratory and through the implementation of the method of prenatal examinations for pregnant women.

In his speech at the opening ceremonies, Minister of Health Tombazos said that the objectives of the center are to develop a service for:

- Diagnosing all forms of thalassaemia.
- Identifying the carriers of the hereditary defect of thalassaemia.
- Prenatal examinations by the method of amniocentesis and placentocentesis.
- Informing the public about this problem.
- The creation of a research service.

Tombazos also stated that:

"At the Anti-anemia Center, 12,000 persons have been examined as of now, and it is likely that this number will increase to 16,000 within this year.

"The results of the effort to combat thalassemia have been encouraging so far, because in the past 70-80 anemic children were being born each year, whereas in 1974 only 54 such children were born, and in 1979 only 19. We hope that through the coordinated efforts of this center the number of such ill children who are born every year will decrease greatly in the future, and we are hopeful that within a period of 3-4 years this number will be reduced to zero."

The Archbishop

In addition, Archbishop Khrysostomos said in his speech, among other things:

"Both as persons and as a Church, we do not consider it proper to use the method of abortion--or, as it is called euphemistically, the termination of gestation--for those embryos which are found to be suffering from thalassemia. We believe that in this case also, prevention is medically and morally the best and most fitting method of dealing with this disease. For this reason, we recommend that a blood test be prescribed by law and given free to young people between the ages of 12 and 15 years, so that these same young people can know whether they are carrying the hereditary defect and can make arrangements accordingly concerning marriage to the opposite sex. We further recommend that our young people be enlightened on this subject through the introduction of a special course about thalassemia in the third-year class of the gymnasia, by incorporating it into the biology course. If the government is ready to put into effect obligatory but free blood tests, then the Church as well will sanction the premarital health certificate, not for the purpose of forbidding any marriage, but so that there will be certainty that future newlyweds will know whether there is any likelihood and what the likelihood is of thalassemia in their children, and thus so that they can make a knowledgeable decision with regard to the assuming of their responsibilities."

12114

CDR: 5400/5513

BRIEFS

MOSQUITO SPRAYING--A joint campaign by the Public Health Department of the Georgetown City Council and the Mosquito Control Service of the Ministry of Health will be launched this week to rid the city of mosquitoes. Members of the Mosquito Control Unit will engage in a fogging exercise in homes to help rid the city of adult mosquitoes, while the Public Health Department of the Council will concentrate on spraying drains, water containers, trenches, septic tanks (as published) and other water containers to kill larvae. The Ministry of Health has urged members of the public to cooperate in the effort by weeding their yards, destroying all unwanted containers and cleaning internal drains. The fogging exercise will take place twice daily, early in the mornings and late in the evenings, in cycles of five days. (Excerpt) (Georgetown GUYANA CHRONICLE in English 13 Apr 81 p 16)

CSO: 5400

PAPER REPORTS ON KALA-AZAR FATALITIES

Lok Sabha Discussion

Madras THE HINDU in English 25 Apr 81 p 6

[Text] New Delhi, April 24. The Union Minister for Health, Mr B. Shankaranand, informed the Lok Sabha today that only two deaths were caused in Bihar by kala-azar. He described newspaper reports about its widespread out break as exaggerated."

But Mr Shankaranand's "information" was stoutly contested by members, including those belonging to the ruling Congress(I) benches.

The Minister was replying to a calling attention motion on the "reported death of a large number of persons in the villages of Bihar...." tabled by Mr Harikesh Bahadur (DSF), Mr Bapusaheb Parulekar (Janata), Mr Tariq Anwar, Mr Harish Chandra Singh Rawat and Mr Zainul Bashir (Congress-I).

A total of 444 kalaazar cases had been detected in eight villages, the Minister said.

Mr Shankaranand said there was no shortage of medicines and DDT and that the Bihar Government had enough stocks of pentamidine.

The National Institute of Communicable Diseases was having frequent dialogue with the State Health Department. In an overall measure to check and prevent kalaazar, 600 doctors had been trained in Bihar.

'5,000 People Affected'

Raising the issue, Mr Harikesh Bahadur said the Minister had not even mentioned Karihar district in his statement where more than 5,000 people were reported affected.

He wanted the Centre to verify if deaths in Bihar were due to kalaazar or starvation.

He asked if any research had been undertaken to prevent the disease.

Mr Shankaranand said kalaazar was not caused by starvation. It was a communicable disease and was caused by what in common parlance was known as "sand fly". Killing of sand fly could only be done by spraying.

Mr Bhupesh Parulekar wanted a study to find out why Katihar district was more prone to kalaazar and whether the medicines received as gifts from the World Health Organisation were being distributed among the needy.

The Minister said northern Bihar was endemic for kalaazar and districts reporting the majority of cases were Muzaffarpur, Vaishali, Samastipur, Baharra, East Champaran, Bhagalpur, Monghyr, Begusarai and Purnea.

Mr Tariq Anwar, Mr Harish Chandra Singh Rawat and Mr Zainul Basher doubted the authenticity of the number of deaths caused by kalaazar disclosed by the Minister.

Mr Shankaranand said there was no question of suppressing any facts and that the information collected by his officials was corroborated by the State Health Department.--PTI and UNI.

Deaths in Bihar

Madras THE HINDU in English 23 Apr 81 p 6

[Text] Patna, April 24. "Kala-azar," the dreaded disease, has taken 162 lives in two panchayats of Araria block in Purnea district of North Bihar during the last 10 months, according to the Health Minister, Mr U. P. Verma.

The Minister, who paid a surprise visit to the affected areas on Wednesday, told newsmen that the victims were mostly Harijans and tribals.

According to a latest survey, 125 of the 500 people examined have been afflicted by the disease.

The State Government has suspended the Araria Block Medical Officer, Dr C.D. Singh, on a charge of negligence of duty. An explanation has been sought from the Civil Surgeon, Dr Sayamsundar Prasad.

Meanwhile, the Government has launched an anti-Kala-azar drive.

The outbreak of Kala azar was first reported in July last year. Subsequently, the block development committee discussed the problem and passed a resolution calling for urgent steps to contain the disease. A copy of the resolution was forwarded to the Block Medical Officer, but no action was taken on it.

CSO: 3400

MALARIA ERADICATION PROGRAM REPORTEDLY FAILS

Madras THE HINDU in English 25 Apr 61 p 6

[Text] New Delhi, April 24. A review of the National Malaria Eradication Programme (NMEP) has revealed that the programme has collapsed in most States except Andhra Pradesh mainly due to administrative problems and lack of entomological studies.

Sixteen expert teams sent by the Health Ministry to various States to review the programme reported their findings at a meeting held here yesterday and today.

The teams have reported that malaria has flared up in some areas due to poor surveillance, inadequate spraying, lack of microscopists and frequent transfer of anti-malaria staff.

The team that covered Tamil Nadu reported that malaria incidence in Madras "is increasing year after year." About 10 per cent of the malaria cases in the entire State is contributed by Madras.

It was noted that 101,250 tablets of an anti-malaria drug are lying unused in Dharmapuri district.

The team that surveyed Karnataka said that malaria has flared up in Belgaum, Dharwar, Bellary and Kolar districts.

It said "there is an alarming increase" of parasites that cause cerebral malaria in the four districts.

The Karnataka team reported that vehicles provided for anti-malaria work were used for other purposes. The team could not see a single motorcycle used for malaria work although the Centre has provided 93 of them.

It said the State was short of spray pumps, microscopists and the insecticide BHC. The spray coverage never, exceeded 30 per cent of the sprayable surface and malaria was increasing steadily and alarmingly in the State.

The team noted the total absence of trained entomologists in the antimalaria work and recommended that immediate action must be taken to recruit entomologists. It said that lack of surveillance had resulted "in low incidence areas reverting back to high incidence areas."—PTI.

CONFERENCE PLANS REGIONAL ERADICATION OF MALARIA

Calcutta THE STATESMAN in English 28 Apr 81 p 12

[Text]

CHANDIGARH, April 27.—The All-India annual anti malaria and malaria conference has decided to go in for regional eradication programme in selected States this year. The States to be covered in the first phase include Andhra Pradesh, Kerala, Karnataka and Tamil Nadu.

Dr S. Pattanayak, Director of the National Malaria Eradication Programme, told the Press today that the three-day conference, which concluded today had reviewed the situation. Some States such as Bihar, West Bengal, Madhya Pradesh and Orissa had not done so well, because of the difficult conditions there. A programme to help them under the auspices of the Swedish International Development Authority had been prepared.

Dr Pattanayak admitted that lack of resources could have been only one of the causes of slow progress in some States. Andhra Pradesh had recorded a 47% decline in malaria cases, Tripura 81%, Jammu and Kashmir 83% and Lakshadweep 73%. The percentage in Uttar Pradesh was as low as

four and Rajasthan seven.

Several States have reported an increase in cases over the previous year. The rise was 88% in West Bengal, 80% in Dadra and Nagar Haveli, 56% in Madhya Pradesh and 23% in Himachal Pradesh.

The conference was satisfied that by and large the objectives of the modified plan of operation, which was formulated in October 1978, had been achieved taking into consideration the progress made in certain States.

The conference was convinced about the important role played by community health volunteers and urged that the State Governments encourage the scheme.

The conference was concerned over the resistance of malignant malaria to the life-saving drug chloroquine in certain parts of India and recommended that measures be taken to contain the spread of this infection to the other part of the country.

Referring to malignant malaria in Uttar Pradesh, Madhya Pradesh, Orissa, Gujarat and Rajasthan have been affected by this particular parasite.

CSO: 5400

INDIA

BRIEFS

KALA-AZAR DEATHS--Katihar, April 20--At least 261 people have died of kala-azar at Chikni and Bangaon villages of Katihar district during the past 15 days, according to the project executive officer, Katihar, reports PTI. He said the victims were mostly children. [Text] [Calcutta THE STATESMAN in English 21 Apr 81 p 1]

CSO: 5400

ISRAEL

BRIEFS

LEPROSY DEATH--Bethlehem (Itim)--Leprosy claimed the life of a 21-year-old woman here yesterday. In recent years no deaths from leprosy have been recorded for this region, familiar with the disease since ancient times. [Text] [Jerusalem THE JERUSALEM POST in English 14 Apr 81 p 2]

CSO: 5400

BRIEFS

VACCINATION FIGURES--Despite the great difficulties that the districts of the province of Maputo have faced, the provincial health department succeeded in achieving the goals established for the first quarter of this year, to the exception of measles vaccinations, which only reached 71 percent of the goal. Despite the lack of transportation, and of cold storage equipment, work proceeded normally and goals were achieved as set. Available data show that in the province of Maputo a total of 5,814 tetanus vaccinations and 2,833 tuberculosis vaccinations were effected during the first quarter. [Excerpts] [Maputo NOTICIAS in Portuguese 14 May 81 p 3]

CSO: 3400/5154

TARGET DATE FOR ERADICATION OF LEPROSY PLANNED

Hong Kong SOUTH CHINA MORNING POST in English 23 Apr 81 p 24

[Text] Beijing, 22 Apr--China has set the year 2000 as the target date for the eradication of leprosy, the NEW CHINA NEWS AGENCY reported today.

Quoting Public Health Ministry statistics, the agency said half of the 600,000 sufferers of leprosy registered in 1949 when the communist regime was established can now be regarded as cured.

Chinese provinces most affected by leprosy are those south of the Yangtze River, particularly the southern Guangdong and Yunnan provinces.

The agency said about 2,000 hospitals or specialised institutes staffed by about 10,00 people form a nationwide leprosy control network.

Infectious cases receive regular treatment free of charge in special leprosy hospitals or villages.

Non-infectious cases are generally treated at home and looked after by special medical works. The agency also indicated that several detection and control campaigns had been launched over the past 30 years in China.

Recently a Canton newspaper said leprosy had been brought "under control" in Guangdong Province, home to 45 million people.

It added that the ratio of sufferers among the total population of the province had decreased from 1.2 per thousand in 1958 to 9.16 per thousand today.--AFP

A spokesman for the Medical and Health Department said that leprosy is no longer a problem in Hong Kong. Last year there were 60 outpatients suffering from leprosy who received treatment at the Kowloon Hospital special skin unit and the number is falling every year. All serious cases were cured and the special ward at Laichikok Hospital closed five years ago.

There is also said to be no danger of cases being found among illegal immigrants since no one suffering from leprosy can make the journey to Hong Kong.

CSO: 5400/4935

NEW RABIES VACCINE PROVEN

Hong Kong SOUTH CHINA MORNING POST in English 22 Apr 81 p 12

[Article by Huo Bailin]

[Text] China has succeeded in making cell-culture rabies vaccines from baby hamster kidneys, bringing relief to victims of an always tortuous and often fatal disease.

The vaccine is administered five times in doses of two millilitres each over 30 day. The first inoculation is on the day of infection. The second is three days later, the third on the seventh day, the fourth on the 14th day and the fifth on the 30th.

The vaccines, called BHK, were originally developed by a group of scientists headed by deputy director Lin Fang-tao of the Virus Research Division at the Biological Product Institute in Wuhan, capital of Hubei Province, central China. They began their research on cell-culture vaccines in 1965, finally synthesising four strains in 1974.

The Public Health Bureau in Hubei Province met in Wuhan in November 1979 and appraised the quality of the medicines. They and 49 experts and professors from Beijing, Shanghai, Hunan, Hubei, Jiangsu, Guangxi and other parts of China agreed that the vaccines were of world quality.

In January, several biological product institutes in Wuhan, Lanzhou in northwest China's Gansu province, and Changchun in northwest China's Jilin province began producing rabies vaccine under the aegis of the Chinese Ministry of Public Health. Their annual output is now approaching four million millilitres.

China, like most countries, used to prevent rabies through a series of inoculations derived from the brains of sheep. Although effective, they caused serious reactions, called anaphylaxis, in patients, even resulting disability and death. The agony was compounded by the necessity of as many as 14 to 21 inoculations before cure.

The new vaccines have none of the old side effects.

Since 1976, scientists at the Wuhan Biological Product Institute injected 301 patients from 14 counties in Hubei, Jiangsu and Hunan provinces and Guangxi Zhuang Autonomous Region with the new vaccines. In follow-up studies, five months to three years later, they found none had suffered from either a recurrence of rabies or anaphylaxis.

In the summer and autumn of 1979, rabies was epidemic in Xinyi county in Jiangsu province, and 57 people were inoculated with the cell-culture vaccines. Their symptoms disappeared.

However, among the 339 others who were inoculated with the sheep brain vaccine, one now suffers partial paralysis, another from Parkinson's disease and four from numbness and pain. Two died because they were unable to complete the treatment regimen.

BHK is also valuable as an immunising agent. Three inoculations will confer immunity for one year. While some may react after inoculation with BHK, it is on a far smaller scale than the old vaccine.

In November and December 1974, the Wuhan institute inoculated 49 healthy people in Shitang village of Yulin county in the Guangxi Zhuang autonomous region. Sixty-three per cent showed a slight inflammation around the vaccination area, which lasted one or two days, six per cent experienced pains in the knees, waist and throat and all had a low fever, which disappeared in one or two days.

Again, in a control group, 40 others in Sukling village of Guiping County also in Guangxi, were given sheep brain vaccine. The entire control group showed slight inflammation and almost all experienced hardening of the skin.

Thirty per cent suffered from headaches and fatigue. All had a low-grade fever.

Deputy director Lin says China expects to begin export of BHK in the near future.

CSO: 5400/4935

PEOPLE'S REPUBLIC OF CHINA

BRIEFS

NEW WEAPONS FIGHT MENINGITIS--The purified vaccine for epidemic cerebrospinal meningitis recently certified by the Ministry of Public Health is a product of successful research of Beijing Research Institute of Biotic Products of the Ministry of Public Health with the cooperation of related organizations. This fruit of scientific research filled a void in China. It has become "a new weapon" to defeat epidemic cerebrospinal meningitis at the advanced level of the world. Epidemic cerebrospinal meningitis is an infectious disease with a relatively high rate of incidence. The victims are mostly children of 1-15 years of age and the mortality rate is rather high. Beijing Research Institute of Biotic Products began to carry out the research in 1972 and since then has continued to investigate the subject with Institute of Microbiology and Epidemiology of Chinese Academy of Medical Sciences, the center of Inspection of Pharmaceuticals and Biotic Products of the Ministry of Public Health, the Dezhou District Public Health and Epidemic Prevention Station of Shandong Province, etc. The comrades of the Cerebrospinal Meningitis Group of the Vaccine Office the Glossy Ganoderma [*Ganoderma lucidum*] Group of Yeast Office, and the Department of Epidemiology and the Department of Inspection and Certification of the Beijing Research Institute of Biotic Products, who concretely undertook the task of scientific research of this project performed close to 1,000 experiments in a spirit of selflessness and finally succeeded in 1974 in producing China's first purified vaccine for epidemic cerebrospinal meningitis. The chief of the group, Wang Liya [3769 4539 0068] who was over 50 years of age, gave himself the first injection of the vaccine to start the human experiment stage of the project, and he was able to experience the reaction to the vaccine personally. From 1976 to 1980, 49.4 million doses of the purified vaccine have been provided by the research institute to give out more than 10 million immunizations. Judging from the results of such a large quantity of human data, after the vaccine enters the human body, the reaction is slight and the serum antibodies increase four to five fold. The mean rate of protection of human groups is 82.14 percent. Generally, immunity occurs in a half a month or shorter period of time after the vaccine is injected. [Chen Xuhad [7115 4872 6275]] [Text] [Beijing BEIJING RIBAO in Chinese 10 Mar 81 p 1] 6248

CSO: 4008/274

BRIEFS

CHOLERA DEATH IN NURSING HOME--The Health Department is investigating the case of a cholera patient who died in a private nursing-home in Colombo. Departmental sources claimed that the private hospital had not taken elementary precautions to isolate this patient from the others. The patient who was admitted to the hospital on Sunday died on Monday evening. The body had even been taken to an undertaker's establishment and embalmed. The Medical Research Institute's report on a stool specimen sent for examination by the private hospital on suspicion that the patient was a cholera case, had come only yesterday morning. The report had confirmed that it was a cholera case. Departmental sources said that two other cases of suspected cholera were reported from Kelaniya and Ja-Ela during the weekend. The patients were sent to the Fever Hospital, Angoda. No more cholera cases were reported from Kantalai for the whole of last week. [Text] [Colombo CEYLON DAILY NEWS in English 22 Apr 81 p 1]

CSO: 5400/4935

TB CONTROL, RESEARCH ADVANCE REPORTED

Mbabane THE TIMES OF SWAZILAND in English 1 May 81 p 1

[Text] The Ministry of Health yesterday formally received the £60,000 mass miniature camera for its T.B. Control Centre in Manzini.

The camera, can take 100mm as well as bigger films for TB research, was received by the Minister for Health, Dr. Samuel Nynd during a ceremony at the T.B. centre.

The design and installation of the machine was by Medical Equipment and Maintenance Service of Durban which was represented at yesterday's ceremony by its Director, Mr. W. Pasbeschitz.

Dr. Nynd described the installation of the camera as the resurrection of the T.B. Control Programme and likened the ceremony to the resurrection of Jesus Christ.

He stated that T.B. was still a problem in Swaziland and it could remain so for some time. He recalled that a random survey carried out by the World Health Organisation some time back showed that about 2 percent of the Kingdom's population could be attacked by T.B.

The old X-Ray camera being replaced developed some problems a few years back and has since not been functioning properly.

Dr. Nynd expressed the hope that the new equipment would help boost the morale of the staff, which he said had dropped after the break in the proper functioning of the old camera.

He also hoped that the staff could still form an effective T.B. control team in the country. He also paid tribute to the British government for having made available the services of Dr. D.H. Shennan who is in charge of the T.B. unit.

Dr. Shennan expressed his pleasure at having been able to work with the staff at the centre and disclosed that the control unit would be forming teams to visit clinics regularly to check on T.B. patients.

The team will be at the Mbabane T.B. unit every Tuesday morning and at the centre in Manzini on Wednesday, on every first Thursday of the month at Matikulu and at Pigg's Peak on the fourth Thursday of the month.

BRIEFS

MEASLES OUTBREAK--More than 90 children have died in Lushoto District as a result of measles, which is believed to have affected three sub-divisions in the district. According to a Shihata report the disease has spread to Tewe, Mamba and Nilingano sub-divisions in Umba, Soni and Ngvashi divisions. In Mamba division where 15 children died, the disease affected children of the same family. In Tewe and Nilingano sub-divisions, a total of 36 children died of the disease. In order to combat the disease, the health department in Lushoto District has been called upon to launch a campaign to persuade the people in the villages to take their children to the hospital for treatment. The Assistant District Medical Officer, Shugu (Singand), said although efforts were being made to eradicate the disease, Lushoto District is facing an acute shortage of penicillin. [Text] [LD140]59 Dar es Salaam Domestic Service in Swahili 1300 GMT 13 May 81 EA/LD]

CSD: 9400/5150

TRINIDAD AND TOBAGO

BRIEFS

GASTROENTERITIS PROJECT--An oral rehydration project is being conducted in the Accident and Emergency Department of Port-of-spain General Hospital. According to the Ministry of Health, the exercise, which is being undertaken in collaboration with the University of the West Indies (UWI), is, so far, proving successful. Objectives of the project are to reduce the mortality from gastro-enteritis and to reduce the number of admissions from gastro at the institution. More than 160 children were treated in the programme and sent home, since it began in January the Ministry added: "It is estimated that at least half of these were cases that would have been admitted to occupy hospital beds, if this programme was not being implemented. The project is continuing, and arrangements have been made to extend the service to St Joseph and George Street Health Centres. Parents and guardians using these centres are advised that they should take their children immediately if vomiting or diarrhoea should occur. [Text] [Port-of-Spain TRINIDAD GUARDIAN in English 30 Apr 81 p 3]

CSO: 5400

MARKETING OF COUNTERFEIT PENICILLIN REPORTED

Lubumbashi MJUMBE: LE QUOTIDIEN DU SHABA in French 5, 6, 7-8 Feb 81

[Article by Yav Mwin-Mem: "False Penicillin on the Market"]

[5 Feb 81, pp 1-6]

[Text] Among the most sought-after commercial products, medicines rank high. The heavy demand seen on the market guarantees exceptional profits. Therefore the cost of pharmaceutical products is spiraling. This does not discourage the buyers who have need of them in the least.

More critical still is the situation when a scarcity of a given product develops and campaign of speculation on its price is launched. In accordance with the immutable law of the market which regulates the supply and demand mechanism, the sellers must outdo their own records.

The scarcity of penicillin on the market in Lubumbashi is obvious. One need only check all the pharmacies to be certain of it. The few businesses which can provide it to you at 12 zaires per flask are too embarrassed to tell you their source of supply.

This is clearly understandable when one realizes that no government supplier can provide you with the product. None of the manufacturers' representatives, Ciba Hoechst Bayer, Warner Lambert, Depharsha and the others, have any penicillin.

Merchants of Death

The pharmacists are not alone in having difficulty providing penicillin. Doctors, nurses and other medical personnel are all faced with the same sad situation. They are particularly seriously affected because they cannot find a valid substitute for this antibiotic, which has a broad spectrum of antibacterial activity.

Much sought after, penicillin when one finds it in any of the local pharmacies, is beyond the reach of modest pocketbooks. Certain dark minds have not hesitated to exploit this situation. Criminal hands have set to producing the product, or more precisely to filling penicillin flasks with anything at all.

What quantities of this product have the merchants of death put on the market?
What is the procedure they use to achieve their ends?

A Foreign Substance in Penicillin Containers

What might one find in penicillin flasks? This is not a game of riddles, and yet one must guess. The question arises. At first glance it seems absurd. A complex of typical features attests to the nature of the product, particularly the label "penicillin" should allow no doubt.

Unfortunately, outward signs are no longer persuasive elements. This is true of the flask in our possession which shows all of the standard features of any penicillin flask.

Bearing a label with instructions for the use of penicillin, and made of clear glass, the transparent container makes it possible to see the product within. Protection of the purity of the substance is guaranteed by a rubber stopper beneath a sealed metal cap.

All of the outer guarantees protect the authenticity of the pharmaceutical product. Who would have suspected the white powder lying innocently at the bottom of the penicillin flask?

It took several applications of this product a few weeks ago in a health establishment (dispensary) to reveal that this was a product which was not penicillin.

Infectious reactions occurred in the patients treated. One would have thought it was a laboratory experiment performed on guinea pigs. It was nothing of the sort. The expert knowledge of the nurses was caught napping. The patients in turn were surprised by unexpected illness.

The Nature of the False Product

We submitted our sample of so-called penicillin to a pharmaceutical scientist. Absorbed in his study, he shook the container and its contents in all directions. He pointed out to us the residue of agitated powder. He told us it was not penicillin.

After a more careful study of the matter, he pointed several things out to us. The carefully reshaped metal cap showed evidence which only the knowledgeable would notice. The rubber stopper was slightly marked by needle holes. All this indicated previous use of the contents of the flask.

Attempting an experiment with the aid of a syringe, the scientist injected distilled water into the flask. This solvent would not blend with the powder, despite the agitation imposed on the solution. The pasty substance remained at the bottom of the flask, with the distilled water above it.

[6 Feb 81, pp 1, 6]

[Text] In yesterday's edition, we published the first part of a study devoted to the existence of counterfeit penicillin on the market. The scarcity of this pharmaceutical product and the resulting exaggerated cost of it constitute the framework of our approach. In the course of the article, we went deeper into the

problem of the authenticity of the product contained in penicillin flasks, and demonstrated by means of examination by a specialist who is an authority on the matter that what we had was false penicillin. Today we invite you to read the proofs, statements and considerations of some departments competent in the matter.

In the end, the expert told us, our solution would never homogenize.

Opening the flask, the pharmacist showed us that this was a product quite different from penicillin. There was no need to rack the brain to find the chemical formula of the components, he told us. We were dealing quite simply with a basic foodstuff given to babies: cream of wheat.

In the powdered stage, this cereal has the same external appearance as penicillin. But a close look told us it was not.

Surprising Statements in the Court of the First Instance

The authorities of the Court of the First Instance gave us access to the files. Thanks to the references we were given, we found some curious statements in the records.

On 2 May 1980, two sellers of counterfeit penicillin offered their product to a local pharmacy. The pharmacist detained them and they were taken to police headquarters. Citizens Mungaza and Kayuyu were interviewed by an OPJ [Judicial Police Officer] who made out a report. On 9 June 1980, these two citizens appeared before the justice of the peace for the Kamalondo zone, sitting in Kenya. Some time earlier, the pharmacist who filed the complaint saw one of the accused at large again. This time, this merchant of death was turned over directly to the Court of the First Instance. His hearing took place on 12 August 1980. What became of his accomplice?

It is important to note that Mungaza and Kayuyu admitted to the investigating judge that they had sold flasks of counterfeit penicillin. They also have on their consciences and paid the fine for filling the penicillin flasks with a foreign substance. How did they manage to bottle that product? The details of the report do not go beyond the statements made by the traffickers in false products.

Regional Health Inspectorate

A physician serving as interim head of this department welcomed us in his office. After listening attentively to the purpose of our investigation, he gave us some words of encouragement.

"The regional health inspectorate is aware of the situation. The inspectorate itself is on the track of the producers of the false penicillin. A commission has just been established within the framework of the regional organization of the health service. It will be responsible for the control of pharmaceutical, food, and veterinary products."

He told us that this tool will make it possible to warn of any kind of danger threatening the population. Traffic in and the presence of counterfeit penicillin on the market is a major concern of the regional health inspectorate service.

However, he concluded, in the specific case of sellers of counterfeit penicillin brought to justice, they should be subjected to more interrogation. It is true that people have admitted selling dubious products. This is not enough. They must also be persuaded to cast all the light possible on this murky affair. In such cases they must be urged to reveal their workshops and show by specific operations how they went about the task and what tools they used. Can one know if other citizens are protecting their accomplices? This possibility, which cannot be excluded, should be the focus of more exhaustive investigation.

A Local Laboratory

A scientific research worker in a unit producing vaccines for veterinary use welcomed us. Our attention was caught by empty penicillin flasks in his office, furnished with cupboards and refrigerators for the preservation of vaccines.

The physician explained the origin of these containers to us in detail. The laboratory retrieves them from Sendwe Hospital. After a number of operations (including cleaning, sterilization and removal of their labels), the flasks are relabeled to identify the vaccine contained. The containers are then sealed by a two-way pressure mechanism.

The laboratory is above any suspicion, he said. Since there are few employees, the control exercised is absolute. None of the personnel could dare to step out of line. But the machines used to seal the stoppers are numerous. One need only count the number of soft drink plants and breweries, he pointed out.

Not only are these machines, which are easily operated, sold like other medical instruments (microscopes, blood pressure gauges, thermometers, etc), but also, they can be manufactured without difficulty. Another possibility available is that it is a simple task for a handyman to adapt the metal cap to the form wanted, he concluded.

A Local Dispensary

In a health establishment where care is provided to private patients, we explained again the development of marketing of false penicillin in the pharmacies. We asked if they have ever been made any surprising offers by traffickers. They said they had never received any such offers, and that they always dealt on the legal market--pharmacies of good repute, whose services are guaranteed by the advice of a specialist in the field.

However, they commented to us, the scarcity of penicillin on the market forces some dispensaries to yield to the tempting offers of traffickers in counterfeit penicillin. The price which can be obtained for these products nags many a conscience.

[7-8 February 81, pp 1, 8]

[Text] In our issues of last Thursday and Friday, we published our report on the counterfeit penicillin put on the market in Lubumbashi by criminals. This is false penicillin which is nothing but cream of wheat. Our readers will have the opportunity to learn the ins and outs of this sad affair. For these readers, we publish the continuation and end of this study.

Our interlocutors have told us that the prices to be obtained for these products lie on many consciences. They believe, moreover, that this provides justification for having less than total faith in the authenticity of the contents of any bottle of medicine.

The administration of penicillin, like any other medication, requires particular care. Penicillin is absorbed by the flesh without problems. The same is the case for any similar antibiotic administered by intramuscular injection.

Our interlocutors said that it is true that an injection of an alien substance in the organism causes unpredictable reactions. In this case, the cream of wheat administered represents a mass of liquid which in the end forms an abscess, since the substance has no carrier medium.

We will inform the reader that we were told that this dispensary had unwittingly injected cream of wheat into three patients, who subsequently suffered from very painful swelling.

Final Note

A number of important facts emerge from our study. In the foreground, we have the scarcity of penicillin on the market. This medication is, for mild cases as for complicated ones, an antibiotic with very potent antibacterial action. Its moderate price places it within the reach of all purses.

One can understand that the exhaustion of the stocks in the government warehouses is a matter of a temporary crisis. The fact that the affiliates of the pharmaceutical houses do not expect to receive more for months becomes a matter of concern. This very tight supply situation is fortunately alleviated by the DCMP, which provides the state hospitals and dispensaries with a considerable volume of pharmaceutical products, including penicillin.

We believe, however, that the regional medical administration should facilitate the supply of large warehouses (pharmaceutical depots) with penicillin and other products in short supply on the market. Abundance would be the best means of combating exorbitant prices and trafficking in counterfeit penicillin.

The establishment of pharmacists' organization would be desirable. Such a body would deal with all the problems pertaining to the pharmacopoeia. In Kinshasa, where such a body already exists, many problems have been solved and the advancement of pharmacy is guaranteed.

An effort should be made by the local authorities, we believe. A number of decisions with a view to combating the black market have been made. The campaign organized against peddlers displaying drugs without the slightest regard for safe preservation of them proved ineffective.

Since this year has been dedicated to social concerns, private pharmacists should disappear from public places in the Lubumbashi environs.

Where traffickers in counterfeit penicillin are concerned, a deeper study should be pursued by all those responsible for punishing actions which place the lives of citizens in danger. Those guilty of this act should be properly punished.

ZAIRE

BRIEFS

RABIES OUTBREAK--Unvaccinated canines wandering near the Tanganyika zones and the town of Kalembe have infected victims, mainly children, with rabies. The Tanganyika subregional veterinarian who reported this situation explained that two victims bitten at the Piltisaf workers' camp in Kalembe are in serious danger. Citizen Mwamba also said bitterly that his department has a shortage of vaccine, and is powerless to affect this scourge which may take on worrisome dimensions. The subregional veterinarian also said that a number of communicable diseases are seriously threatening the herds, particularly in the Marungu (Moba). [Text] [Kinshasa ELIMA in French 20 Mar 81 pp 1, 7] 5157

CSO: 3400/5109

MINISTER CLAIMS SUCCESS OF BATTLE AGAINST FOOT-AND-MOUTH

Gaborone DAILY NEWS in English 21 Apr 81 p 2

[Text]

BOTSWANA has never, in the long history of her meat processing, industry slaughtered a single animal at Lobatse, infected with foot and mouth disease.

This assurance was given by Botswana's Minister of Agriculture Mr Washington Meswete at the opening of the Botswana Meat Commission's cold store in London recently.

Mr Meswete said Botswana was doing everything in her power to comply with the regulations set down by the European Economic Commission (EEC) covering food, hygiene and animal health.

He said many of the EEC members who had been to Botswana were witnesses to that fact.

Mr Meswete said in 1977 there were sporadic outbreaks of Food and Mouth diseases in many parts of Botswana which met governments' battle against the disease.

The Minister assured his audience that Botswana is now free of the cattle disease. He also said that some parts of the country were never affected at all for the last 30 years, by foot and Mouth disease.

"We have a system of cordon fences breaking the country up into zones which can seal off effectively, diseased areas and also quarantine camps through which all cattle en-route to the abattoir must pass and be inspected by the officials of the Veterinary Department."

"At the abattoir too, final checks are made both ante and post mortem so that no diseased beast can escape the net."

The Minister made it clear that Botswana's disease controls are severe and to some of our people might even appear to be punitive because in some distant areas people have not slaughtered since 1977 due to such measures.

In addition to these precautions, a vaccine laboratory has been established in Botswana. He said the laboratory has proved a success, so much that it is already exporting to our neighbouring countries.

The Minister observed the opening of the storage in London as a continuation and completion of the control chain. It takes about four weeks for products to reach London by sea from Botswana.

The Minister observed that by the establishment of that storage, Botswana has invested money because the country is now serving a lucrative market.

The Minister also complained that the officials of the Ministry of Agriculture had presented to their counterparts in Brussels, all relevant facts about the foot and mouth diseases but still a decision to resume import of our beef had not been made.

Botswana government has therefore decided to take up the matter with higher level authorities and would be going immediately to Brussels, and was optimistic about a happy outcome from the talks.

Addressing himself to the occasion, the minister congratulated the Commission in the United Kingdom on its achievements since its operation in 1977.

The commission took over the selling of Botswana's beef and at the same time purchased the cold storage which he was opening.

The cold storage, the Minister said was a sign of confidence that Botswana's important links with the EEC would continue and prosper.

The Minister however, observed the difficulties the meat trade in Europe experienced and which had made it a bit difficult for them to attend to Botswana's problems.

He explained that the Botswana Meat Commission was a para-statal organisation controlled by a Board of Commissioners

appointed by the President, who are responsible to the nation through the Ministry of Agriculture.

The Minister told his audience that Botswana is a cattle country by tradition, and also that 50 per cent of the population, in one way or another, look to cattle to provide their basic necessities of life, to bring up their children and to care for their old people. He said cattle in Botswana are our only real form of social security and provide an important part of foreign exchange earnings.

He said it is through the Commission's abattoir at Lobatse that the produce of over 200 000 cattle in a normal year is processed and exported.

"We are being an exporter of practically 97 per cent of all that is processed, very much at the mercy of the importing countries. For this reason our relationship with European markets, especially the UK have always been very important to Botswana.

The ceremony was attended by among other dignitaries, Botswana High Commissioner in London Mr Kgarebe and his wife.

Among attendants were representatives of meat trade, banking insurance, shipping and veterinarians from all over Europe. **SOFA**

CASE OF PASTEUROLOSIS DESCRIBED

Sofia VETERINARNA SBIRKA in Bulgarian No 1, 1981 pp 20-22

[Article by Dr B. Vachev, Dr V. Dobriv and Dr L. Karaivanov, Central Scientific Research Veterinary Institute; Dr S. Simeonov, Vidin RVS [Regional Veterinary Station]; Dr S. Ignatov and Dr I. Iliev, Mikhaylovgrad OVMTs [Okrug Veterinary Medical Center]: "Case of Pasteurolosis in Hogs"]

[Text] Pasteurolosis in hogs, formerly known as hog cholera, throat disease or hemorrhagic septicemia, was a neglected disease for the reason that for almost 15 years no case had been noted in the country. There were sporadic breakouts of the disease in small private plots and enzootic cases in the public farms. In 1940 and 1941 there were more than 300 hog deaths from pasteurolosis in swine and until 1945 it was on the list of mandatorily reportable communicable diseases.

Chenchev and Sivovski identified pasteurolosis in swine (1954) after injecting anti-plague serum.

According to Kernkamp and Stoyanov (1979), pasteurolosis in swine is an endogenous infection which almost always comes with plague, Aujeszky's disease or viral and microplasmatic pneumonias.

In 1979 a severe pasteurolosis enzootic broke out at the "M" Hog Breeding Farm in which about 8,000 hogs were being raised. The lack of experience in the struggle against the disease under industrial or large-scale hog-breeding conditions, as well as alterations of some epizootological characteristics make the description of this case necessary.

The disease appeared first in the fattening sector, after the hogs were fed rejects from the poultry slaughterhouse. The major clinical symptoms were difficulty in breathing, throat soreness and snorting. Subsequent cases involved a swelling in the throat and clearly identifiable dyspnea and gave indications of pasteurolosis. A bacteriological test confirmed the diagnosis: Gram-negative small bipolar bacteria were isolated. The agent was isolated from the parenchymal organs of hogs which had to be destroyed. After a 24- to 48-hour cultivation in a medium of blood agar, the growth of isolated colonies was noted. The growth of the agent was more compact in matter removed from the edematous parapharyngeal area.

Isolated strains fermented (xylose, sorbitol, mannitol, glucose, galactose, saccharose, levulose, mannose); they were negative for arabinose, lactose, melitose, salizyne,

adonitol, maltose and inulin. They were positive for indole. They reduced nitrates and had a negative ONPG reaction. In a lysis test with bacteriophages, *Past. multocida* produced lysis without reproducing it. All four isolated strains were pathogenic to mice. The contaminated animals died within 24 hours. The initial strain was isolated from them. Two-month-old chicks were intravenously injected with this culture and died in the 48th hour (the illness did not develop as a result of intramuscular injection). A starting strain was also isolated from the internal organs of the dead chicks. We added them to the feed of two-month-old pigs. The disease appeared with its characteristic symptoms and death followed on the 48th hour. Based on biochemical indicators and lysis with bacteriophages and the pathogenic nature of the strain administered to white mice, poultry and pigs, we classified the isolated agent as *Past. multocida*.

The antibiotic chart of the strain shows that the best treatment is achieved with chloramphenicol (+++), followed by tilan (++) and furazolidon (++)

On the basis of such studies aimed at lowering mortality and eliminating the disease, we implemented the following measures:

Daily clinical examinations of the entire herd; the clinically sick animals were isolated and treated with chloramphenicol, 0.06 per kg live weight (orally). The treatment also involved medicines which strengthen the heart and the general condition of the body, such as polyglobulins, glucose, calcium and others. About 90 percent of the treated pigs recovered. The contact and clinically healthy pigs were treated with a dose of 0.03 chloramphenicol per kg live weight, mixed in the feed for a five-day period. The morbidity rate declined from 20 to 30 percent to isolated cases. On the fourth day we added to the feed furazolidon in a prophylactic dose (0.055 per kg live weight). The therapy was continued for six more days;

Along with the therapeutic and prophylactic treatment with antibiotics we took several other general prophylactic measures such as quarantine, cleaning, disinfection with a 2 percent solution of sodium base and dusting with lime, deratization and disinsection;

All pigs were fed 10 percent alfalfa meal which was added to their rations for a 10-day period.

During our experiments and observations of the enzootic, we noted a single case of disease in sows raised for a single breeding. This was caused by the absence of a hog breeder in the contaminated area, i.e., in the feeding sector.

The fact that the disease did not break out in the stalls neighboring the contaminated ones proves that its communicableness is low.

In a 10-day period 122 pigs died in the farm, showing the following more typical pathoanatomical symptoms: severe hemorrhage on the skin and the subcutaneous connective tissue, seroses in the kidneys, bladder and intestinal membrane; edema and glaucopneumonic changes in the lungs and expanded, juicy and hemorrhagically inflamed lymph nodes; massive swelling in the throat, containing a yellowish or pink serous liquid. In chronic cases (100 percent) we diagnosed pericarditis and pleurisy.

Following the treatment and the specific and general measures which we took, no new case was registered in 20 days. After this quiet period, isolated cases broke out in the feeding area. This concerns the latent development of the disease.

The disease was totally eradicated after the systematic slaughtering (after the required minimum live weight was reached) of the hogs in the feeding area. The principle of "everything empty--everything full" was strictly observed.

The epizootological study revealed that the infection had originated in improperly treated waste at the poultry slaughterhouse in Nizhny Novgorod. This was supported by the following epizootological data:

Prior to the outbreak of pasteurellosis, no clinical-epizootological manifestations of the disease had been noted at the farm and causative agents had not been isolated from the examined materials.

In addition to poultry, the poultry slaughterhouse slaughtered rabbits; the latter are quite frequently carriers of pasteurella.

No control was exercised over the decontamination of waste in the poultry slaughterhouse. Furthermore, there was no separation between the clean and dirty areas.

About 10 days after the slaughter of a large number of hogs at the center of the outbreak of pasteurellosis, the disease broke out in another three small hog farms which used waste from cafeterias of enterprises which had purchased pork from the meat combine.

These data indicate that it was a case of an epizootic pasteurellosis in swine, which was quickly localized and eliminated thanks to the comprehensive measures we described. This case calls for establishing stricter control of the sterilization of wastes in the meat processing industry, the separation of the clean from the dirty area and the establishment of permanent diagnostic and epizootological control in the corresponding hog-breeding farms.

5003

(50) 5400

BRAZILIAN INTESTINAL VIRUS ATTACKS DOG POPULATION

Santiago EL MERCURIO in Spanish 25 Feb 81 p C-1

[Text] A serious epidemic involving intestinal hemorrhaging has been affecting the dog population of Santiago since December, and the mortality rate has increased in the past few days.

Veterinarians disagree as to whether a mass dog immunization program should be organized with a vaccine they say would attenuate the disease but which is not manufactured in Chile and is imported by only two laboratories.

Some veterinarians pointed out that the only solution was to treat the symptoms, which is what generally occurs with virus diseases. Once the disease strikes, it is very improbable that the affected animal can be saved.

They emphasized that the virus, which is highly resistant and of the filterable type, does not attack man and is the result of a mutation of another virus that affects cats with so-called feline typhus, or panleucopenia felina.

Dr Carlos Munoz Cortes said this is a virus that attacks the animal's digestive system, in dogs alone, causing copious vomiting and diarrhea, loss of appetite or anorexia, along with adynamia or loss of movement. The vomiting is with blood, and the animal first shows signs of bronchitis, pharyngitis, and the aforementioned symptom of loss of appetite.

He added that this is a disease that is caused primarily by lack of preventive measures as it was introduced by dogs imported from Brazil, Ecuador, and Uruguay. The first cases appeared 2 years ago in the United States. It moved on to Panama and thence to Brazil.

The dogs imported from Brazil to Chile were "caniches" and poodles, which were brought to the upper-class section of Barrio Alto of this city. The disease spread through La Piramide to Conchalí and Recoleta and later toward the lower neighborhoods of the western section.

The Cases Are Tending To Increase

"I began to notice the appearance of this disease in the first part of December; on the 13rd, the number of cases began to increase," Dr Munoz explained.

He said that he himself had attended many cases, not all of them fatal or very serious. But in those cases where the treatment is not effective, it is necessary to sacrifice the animal. "The serious thing is that the virus is becoming more powerful all the time and cases are increasing. The laboratories did not think the disease was going to spread so rapidly and not all the vaccines are duly tested. Those of U.S. manufacture are not available and there are no records of their reliability. The French vaccines have advantages and they have been tested and used in outbreaks; they succeed in preventing the disease."

On his part, Dr Jorge Droguett of the Bilbao Veterinary Clinic said that there are cases that lead one to conclude this is a tiny virus (Parvo virus) that causes diarrhea with hemorrhaging and dehydration in dogs, but it has not been isolated officially. Opinion about vaccinating dogs is divided.

In the Apoquindo Veterinary Center, Gonzalo Velasco, a student of veterinary medicine, said that the parvovirus causes a disease that did not exist in Chile and which was imported from Brazil. "It produced acute enteritis and hemorrhaging. The dog starts vomiting and has diarrhea, stops eating, becomes dehydrated, and dies. We had five cases here last week, but the disease has been present since December."

In the Alemans Veterinary Clinic, we were told that the disease produces ulceration of the digestive tract of dogs and necrosis or death of the tissues. "We," said a doctor who was not identified, "are attacking the symptoms, administering serum for dehydration, coagulants, and other medication."

Finally, the specialists explained that the disease is propagated through the air and thus has spread in 2 months from the high neighborhoods to the low neighborhoods in the western part of the city.

9015

CSO: 3400/2094

AUTHORITIES RAISE LEVEL OF OCHRATOXIN ALLOWED IN PORK

Copenhagen INFORMATION in Danish 2 Apr 81 p 5

[Article by Lolf Hansen, Lottie Smith Petersen, Jens Svenstrup Andersen, and Lone Vestergaard: "More Poison for Consumers"]

[Text] Quietly, the Veterinary Directorate and the State Foodstuffs Institute (SL) in early January raised the level of ochratoxin permissible in pork distribution to consumers. Formerly, the whole hog was rejected if more than 10 micrograms of ochratoxin was found per kilogram of hog kidney. Now, the hog carcass is rejected only if more than 25 micrograms per kilogram of kidney is found. A consequence of this change is that hog carcasses previously rejected in meat inspection are now distributed to the consumers. Increasing the level of ochratoxin is taking place without a re-evaluation of the toxicity of the substance.

What is Ochratoxin?

Ochratoxin is a poison produced by two moulds (*Penicillium viridicatum* and *aspergillus ochraceus*,) that grows on feed grains, in particular if they are moist.

In animals fed on the mouldy grain, the poison collects among other places in the kidneys, damaging them. But the poison is also found in muscles (meat) and fat, most often in the ratio 4:2:1 for kidneys, muscles, and fat.

Since hogs in this country are fed mostly on grains it is pork in particular against which one must be on guard.

Today, ochratoxin poisoning occurs only very rarely in humans. What is feared is the long-range effects of small daily doses over many years. In animals the acute toxic effect is seen more frequently. Hogs fed on grain containing ochratoxin will slowly sicken. Ochratoxin collects in the kidneys and destroys kidney tissue. This means that the kidneys cannot absorb the nutrients (glucose, vitamins, minerals, etc) healthy kidneys would have retained in the organism. Instead, the nutrients are discharged in the urine, and the hog loses weight.

Why the Increase?

The justification offered by the Veterinary Directorate and the State Foodstuff Institute for the increase is that the number of hogs showing any ochratoxin content

at all has been greatly reduced. Thus the total amount of the poison loaded upon the people is not supposed to rise, even though the limit is raised and more hogs slip through the control.

This is a cynical argument since ochratoxin is as poisonous as ever. The real explanation is that pressure from agricultural organizations has been submitted to.

At the old limit carcasses to the value of 29 million kroner were rejected, a loss that had to be borne by the producers. In this is included 200 kroner per laboratory test necessary to determine whether or not the carcass is to be rejected. This is also paid by the breeder.

Another justification is that Denmark is the only country in the world that controls ochratoxin, and it has not been determined with certainty that the substance has a harmful effect upon humans. One may wonder how the limit could have been set at precisely 25 micrograms.

Earlier, hog raisers attempted to get around the problem in various ways. If the hog is ailing and the reason is mouldy grain, its kidneys can be "washed" by feeding it grain free of ochratoxin for a month prior to butchering. Swedish investigations show, however, that traces of the poison can remain in the meat, even though the kidneys pass inspection. A combination of drying and ammonia treatment has also been tried. Drying alone kills the mould, but does not inactivate the toxin formed. Therefore the supplementary ammonia treatment. Unfortunately, the hogs refuse to eat the grain treated with ammonia, and each fourth hog treated had kidney damage--but of a type that did not lead to rejection in inspection. The SL's arguments are not tenable. In our opinion the justification for raising the permissible limit of ochratoxin in pork are questionable. An unchanged amount eaten by the people as a whole is slight comfort for the consumer who draws the wrong number, namely the hog with 25 micrograms per kilogram of kidney tissue. This amount is not even declared.

The number of poisoned hogs should be dropping. We have found no documentation for this assertion. On the contrary, the publications of agricultural organizations warn that an increase was to be expected. HOG PRODUCTION of October, 1980, mentions the danger of a new epidemic of mould [hyphomycetes] this year, the reason being that the fall and climatic condition in 1980 were similar to those of 1970 and 1978, when the wet fall resulted in an epidemic.

In view of this it is incomprehensible that the rejection limit is being raised. The SL has not undertaken a toxicologic re-evaluation--ochratoxin is still dangerous. How, then, can a new limit of 25 mg/kg be set?

Control Questionable

Control consists of inspection of the kidneys. If they are pale, they are tested for ochratoxin. If the content is above 25 mg/kg the entire carcass is rejected, while content of between 10 and 25 mg/kg means that the kidneys alone are rejected. However, ochratoxin occurs in kidneys without visible changes as well, but these are not caught in the inspection.

In other words, consumers are forced to act blindly, for what do we know about the production of our foodstuffs? We are so far removed from the production of our foodstuffs that we have no idea of whether or not healthful products are produced by the system.

The industrialization of food production has led to demands for effectiveness and profitableness. Attempts are made to attain this by means of unnatural growth conditions for animals and plants. Attempts are made to "resolve" the side effects of artificial growth conditions by means of psychopharmacopeia, penicillin, and other antibiotics, chemical fertilizers, pesticides, and other things. Threshing grain by combine has made threshing possible in wetter conditions than earlier, thereby increasing the danger of ochratoxin epidemics. Centralization of production and processing of our foods have heightened the demand for control of the products that come out of the system. The consumers themselves cannot undertake this control, but are forced to hope that the state's control organs carry out the task effectively.

The matter in question makes this hope pale, however. Neither the Consumers Council nor NOAH (expansion unknown) knew anything about the raised rejection level before it was mentioned in POLITIKEN on 17 January, 1981. Neither an orientation nor a press report was issued in advance. Thus there was no opportunity to protest until the regulation had been in force for 2 months.

The SL's role in raising the rejection limit also shows that the SL neither can nor will guard the people's health interests, but acts as the lengthened arm of industry and agriculture in that economic considerations once more have been allowed to weigh more heavily than regard for the environment and health. After this dirty deal our confidence in the SL as a guardian of the interest of the consumers is zero.

Leif Hansen, Lotte Smith Petersen, Jens Svestrup Andersen, and Lone Vestergaard are active in NOAH's food group in Copenhagen. Sources: VAR FODA, No 6, 1979, journal of the Food Administration [Swedish]. NY TID OG VI, February 1980. SWINE PRODUCTION, October, 1980. LANDSBLADET, No 2, Jan, 1981.

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BRIEFS

RINDERPEST DEATHS--Cattle plague has killed 113 wild buffaloes and seven wild pigs at the Kagiranga park, according to information received in Calcutta on Sunday. Rhinos and deer have escaped. Mr D. K. Lahiri Chowdhury member of the Eastern region committee, Wild Life Fund, who visited the area recently, said that the outbreak of the plague, known as rinderpest, was confined to the western range of the park. Domestic cattle which was said to transmit the disease, in the fringe areas, were vaccinated. [Text] [Calcutta THE STATESMAN in English 20 Apr 81 p 9]

CSO: 5400

MOZAMBIQUE

PREVENTIVE VACCINATION CAMPAIGN AGAINST CARBUNCLE

Beira NOTICIAS DA BEIRA in Portuguese 18 Apr 81 p 3

[Excerpts] The cattle vaccination campaign in the province of Sofala will be launched next Tuesday. Its objective is to immunize cattle against various diseases that could affect the normal and desirable development of the herds.

Vaccinations, which basically consist in the immunization of cattle against hematic and symptomatic carbuncle, will begin in the city of Beira on 22 April and will include in succession the Dondo, Buzi and Marromeu districts. The campaign will end on 30 May.

One of the officials of the provincial department of livestock stated that "hematic and symptomatic carbuncle are diseases that have not yet been registered in the province of Sofala, at least in recent years. However, we carry out this vaccination campaign yearly as a preventive measure." He added that as of last December, this province had a little over 47,000 heads of livestock, 26,000 of which belong to the state sector.

This official said that the disease that has most frequently affected both herds and hogs is the tse-tse fly. Protection against this disease requires important financial means not available at present, involving the aerial spraying of the forests harboring the tse-tse fly. At this time, the fight against this disease is carried out only through vaccinations. It should be noted that it was detected in the Mafambisse area, where a number of measures are being adopted.

In answer to a question about the support that the provincial department of livestock has provided the family sector, this official said that it has been minimal because of the difficulties encountered in controlling the activities of this sector. He added that the methods used by the family sector in raising the herds, and especially the poor treatment of animals, are at the origin of this situation.

Following this vaccination campaign, another will take place aimed at the incidence of brucellosis.

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LOCAL FIRM DEVELOPS LEPTOSPIROSIS VACCINE FOR CATTLE

Christchurch THE PRESS in English 29 Apr 81 p 7

[Text]

PA Wellington

A New Zealand company has developed a vaccine which has the potential to control one of this country's main occupational diseases.

Severe headaches, muscular pains, fever, and eye trouble are symptoms of leptospirosis, a disease which according to a 1979 Health Department survey infects 400 New Zealanders each year.

Ironically, the disease has become a serious problem because of the modernisation of the New Zealand dairy industry. The elevated milking platforms found in modern dairies expose farmers and their families to infected cattle urine — the main source of human infection.

The vaccine has been developed at the Upper Hutt laboratories of I.C.I. Tasman, Ltd. after five years of intensive research and development.

It is the first leptospirosis

vaccine for cattle active against the three main strains of the disease — pomona, copenhagen, and hardjo. The company also believes that it is the first leptospirosis vaccine specifically developed to control the shedding of the disease organisms by infected cattle.

These particular qualities have already resulted in a strong New Zealand demand for the vaccine, as well as a flood of inquiries from overseas.

While leptospirosis is a serious occupational hazard for people who live and work on dairy farms, the disease can also be costly in terms of animal production. The pomona and copenhagen strains of the disease can infect all livestock, but cattle are the area of greatest concern to New Zealand farmers.

Calves usually suffer severe illness, with deaths being common on many farms. Adult cows may suf-

fer miscarriages, stillbirths, fever, depression, and mastitis.

From a human health angle, the greatest worry is the hardjo strain of the disease. Cattle infected with hardjo do not show symptoms, but shed large quantities of disease organisms in their urine.

"Used consistently the new vaccine will eliminate leptospirosis from a herd," said Mr David Liardet, the leader of the I.C.I. Tasman research team.

"In theory, it could eliminate the disease from New Zealand, but that would depend on all cattle farmers adopting a regular vaccination programme," he said.

"What we can realistically say is that leptospirosis need no longer be a worry to farmers who regularly vaccinate their cattle. With luck, that potential should be reflected in the health statistics almost immediately."

BRIEFS

FACIAL ECZEMA OUTBREAK--PA, Wellington--Facial eczema among sheep and cattle in the northern half of the North Island, has been a serious problem for more than two months now, costing some farmers thousands of dollars. One sheep-farmer who owns a 242 ha property near Havelock North estimates his losses to be up to \$30,000 at this point and more for his neighbour. "All suggested remedies have been tried with no result," he said. The facial eczema outbreak has affected such areas as Northland Bay of Plenty, Waikato, Taranaki, and Hawke's Bay. [Text] [Christchurch THE PRESS in English 8 Apr 81 p 2]

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PARAGUAY

BRIEFS

FOOT-AND-MOUTH OUTBREAK--An outbreak of hoof and mouth disease has been detected in Mario Roque Alonso District. This disease was detected by veterinarians after examining several head of dead cattle. [Asuncion ULTIMA HORA in Spanish 29 Apr 81 p 13]

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FUNGAL DISEASE REPORTED THREATENING GRAM CROP

Bombay THE TIMES OF INDIA in English 27 Apr 81 p 15

(Text)

NEW DELHI, April 26.

A DEADLY fungal disease, which is yet to be properly identified, has ruined the gram crop in certain areas this year, causing huge financial losses to some of the public-sector institutions.

The seed crop of gram at the Hissar farm of the Haryana state farms corporation was destroyed completely. The loss is assessed at nearly Rs. 40 lakhs. Gram fields of the Hissar-based Haryana Agricultural University (HAU) are also reported to have been annihilated by this disease which has shown its wrath primarily in research farms and on seed crops, sparing mercifully the fields of general farmers.

Though the overall gram production in the country is not likely to be affected significantly owing to the emergence of this disease, agricultural experts feel greatly concerned about the development. Its recurrence in the coming years in any substantial measure can jeopardise the prospects of boosting the production of gram, the most important pulse crop of the country. There is, however, a possibility that it may not appear again for many years, experts maintain.

At the request of the Union agriculture ministry, the Indian Council of Agricultural Research (ICAR) has asked plant pathologists of HAU, the Punjab Agricultural University, Ludhiana, and the Indian Agricultural Research Institute, here, to identify the disease and the fungus associated with it. Their reports are still awaited.

According to preliminary investiga-

tions, the disease is believed to be botrytis, which had almost never occurred in the north-western states before although incidents are known of its attack on gram crop in Bihar and some other eastern states. Even last year, gram fields in the Tal area of Bihar were badly damaged by botrytis.

During the current rabi, the outbreak of this disease has been reported mainly from Hissar in Haryana and the Kanpur area in Uttar Pradesh. It is also reported to have appeared in some fields in Punjab but the extent of its coverage is negligible. Bihar has remained practically free of this disease this year.

LITTLE WORK DONE

The fungus causing botrytis disease appears in the form of a mould in water-saturated fields. The leaves of the infected plants start drying up and within a week the whole crop wears a blighted appearance. The loss in yield is generally one per cent as the disease attacks at the flowering stage and kills the plants before they can bear grain.

According to ICAR scientists, little work has been done on this disease in India or abroad as it had never posed a serious threat to commercial crops. Even the control measures are not known.

Krishn Sharan sources feel that gram production in the country this year will be between five and 5.5 million tonnes. Good winter rains in the major gram-growing areas of Madhya Pradesh, Uttar Pradesh and Rajasthan benefited the crop, compensating for the paucity of soil moisture at the sowing time. A relatively longer cold spell this year has also helped in ensuring a good gram harvest.

OUTBREAK OF COCOA DISEASE CAUSES CONCERN

Kuala Lumpur BUSINESS TIMES in English 4 Apr 81 p 12

[Text] THE outbreak of cocoa disease in the Quoin Hill area off Tawau, one of the largest cocoa growing areas of Sabah, has been contained although the situation in some parts of the affected area has deteriorated slightly since the disease was detected in October last year.

Growers in the area, including North Borneo Timber Berhad, estimated that about 12,000 acres had been affected. Fortunately for the industry, the outbreak occurred among large estates where control measures are easier to implement.

The Department of Agriculture took immediate steps to ban the movement of cocoa pods within the affected area as well as out of it.

The most effective means of containing the disease presently, according to experts, is for the growers to be more hygienic in the processing of cocoa pods. They have recommended that after the extraction of the beans, the remains of the pod be hygienically disposed using plastic bags.

Apart from the De-

partment of Agriculture, the East Malaysia Planters Association, which accounts for about 45,000 acres of cocoa plantations, has sponsored its own three-year research programme to eradicate the insect-induced disease.

It has brought in two entomologists from the Commonwealth Imperial College of Science and Technology in London to assist in the research. They are Dr John Mumford and Mr Roger Day.

Dr Mumford told *Business Times* in Tawau that cocoa pod borer is the larva of an insect in the moth family known scientifically as *Acrocercops cramerella*. It lays eggs on the top part of the cocoa pod. Upon hatching, the larvae will eat their way into the core of the fruit.

It normally attacks ripening cocoa fruits. If seriously infected, the pods will rot and drop. But Quoin Hill growers have so far been able to salvage their crop without much loss. Another side effect of the attack is that it induces germination of seeds in

the pods.

The entomologists over the last two months observed that the insect is not a fast breeder, an adult lives for only a week and its total life cycle lasts about four weeks.

They felt that chemical control may not be feasible at present because the behaviour of the insect is not fully known except that it is active only for a few hours a day towards the evening and is well camouflaged.

They warned that indiscriminate use of insecticides could be dangerous in the long term. They preferred natural control using such techniques as improved hygiene and breeding disease resistant cocoa trees.

The two experts hope to compare notes with research bodies in Peninsula Malaysia and Indonesia. The disease is not known in Peninsula but the experts want to determine whether there is a connection between cocoa pod borer and a similar insect which feeds on rambutan.

Sources in Sabah believe that the disease originated from either Indonesia or the Philippines where cocoa pod borer has been blamed for the setback in cocoa growing.

The earliest documented occurrence of the disease was in Java in 1896. Dr Mumford will be travelling to Java to see what Indonesian researchers have found out about the insect.

Apart from improved hygiene during processing, estates experimented with complete destruction of pods from the affected trees. But this proved quite impossible because a few pods might still be hidden in the trees.

Chemical control was also being discounted for the time being because growers do not know which insecticides would be most effective against the insect. They fear that other useful insects would be destroyed and the cocoa pod moth would become resistant to chemicals.

Insecticides are known to have been used in Indonesia and the Philippines with little success.

NEW RUST DISEASE HAS LITTLE EFFECT ON WHEAT YIELDS

Christchurch THE PRESS in English 10 Apr 81 p 20

[Text]

The new rust disease which appeared in wheat crops in the past season has not had the impact on yields originally feared, according to a Press Association message from Wellington.

However, the Ministry of Agriculture and Fisheries is warning farmers they will have to act quickly next season to stop yellow or stripe rust from spreading.

Officials estimate that between \$450,000 and \$1.3M of wheat was saved by prompt action taken when the disease was first seen in New Zealand late last year.

In Southland, where the disease was most widespread, the harvest this year is down by about 10 per cent, or 10,000 tonnes, on last year.

However, the ministry's regional advisory officer in Invercargill, Mr Ray Rankin, says the greater part of the loss was probably due to the dry weather there.

The disease, which is thought to have been blown by the wind from Australia, also spread into the country's main wheat-growing area, Canterbury. However, it did not reach this province until late in the season and too late to have much effect on yield.

The losses would have been substantially higher in Southland if the spraying programme initiated by the Ministry had not taken place, Mr Rankin said.

A Ministry report estim-

ated that 3200ha were sprayed. Assuming a loss of yield of between 20 and 50 per cent if the disease had gone unchecked, the total wheat saved was worth between \$457,000 and \$1.34M, said the report.

Mr Rankin said that there was a danger that farmers might think no action would be needed next season in combat the disease because of the relatively small loss of yield this year.

"We are worried that the farmers will think the Ministry cried wolf. But that is not so, and we are trying to get the message across that the disease will recur next season, at an earlier stage, and spraying will be needed."

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SWAZILAND

MEETING OF RED LOCUST CONTROL ORGANIZATION REPORTED

Mbabane THE TIMES OF SWAZILAND in English 30 Apr 81 p 1

[Text] Swaziland is playing host to a two day meeting of the executive committee of the International Red Locust Control Organisation for Central and Southern Africa.

The meeting opened at the Swazi Inn yesterday and was expected to last until today. The organisation formed 11 years ago to succeed the International Red Locust Control Service which began operations in 1949, is responsible for survey and control of Red Locust in the member countries.

The present members are Botswana, Kenya, Malawi, Mozambique, Swaziland, Tanzania, Uganda and Zambia. The governments of Burundi, Rwanda, Angola and Zimbabwe have been invited to join the organisation.

Zimbabwe has already indicated her willingness to join this year. The red locusts breed in certain areas known as red locust areas in Malawi, Mozambique, Tanzania and Zambia.

These areas are said to have similar features topographically and climatically, and are capable of producing migrating swarms of red locusts.

Once the swarms are formed, the locusts can fly out of the breeding areas to other parts of the region and destroy various kinds of crops.

Some of the breeding areas are said to be still active although swarms of the locusts have not been seen in many member countries.

The executive committee of the organisation, of which Swaziland is chairman, deals with normal administrative issues of the organisation and also makes recommendations to the governing Ministerial Council on policy, scientific and budgetary matters.

The committee meets at least three times a year.

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CAMPAIGN WAGED AGAINST CACAO PLANTATION BLIGHT

Caracas EL UNIVERSAL in Spanish 16 Mar 81 Sec 2 p 8

[Article by Boaneg Pernia Ramirez]

[Text] San Cristobal, 15 Mar -- The National Cacao Fund, working through specialists and workers at 80 sites, is pushing ahead with its campaign to control and eradicate the disease known as witch's broom, which is doing a great deal of damage to cacao plantations in the area of La Victoria, Apure State.

This information was divulged by Ruben Dario Oliveros Vasquez, chief agronomist of the southwestern region of the National Cacao Fund, who pointed out that his organization, together with the Division of Plant Health of the Ministry of Agriculture and Husbandry, has been pursuing this plant health campaign intensively since its inception last year.

"At present," Oliveros Vasquez said, "some 600 hectares of cacao are under treatment where the disease has caused losses and where the farmers are hastening to replant with a hybrid type that is resistant to the disease and highly productive. This is being provided by the National Cacao Fund."

According to Olivares Vasquez, the effort of the organization which he heads in the southwestern region is organized in three stages: first, the control and eradication of the disease; second, the recuperation of the areas that produce cacao; and third, the protection of the bean. It was learned that deliveries of cacao seed resistant to witch's broom disease, which has considerably affected plantations in the La Victoria area of upper Apure, have already begun just this past week.

The high official also reported that a cacao-marketing center, built by the National Fund in Obispos, State of Barinas, opened yesterday. Producers had requested such a center for many years; it will benefit cacao growers in such areas as Charal, Borburata, Quebrada Seca, and Barinitas, which comprise the region known as the Barinas cacao belt.

"Heretofore," he added, "producers brought their crops to a market center 150 kilometers from this cacao belt, that is, to Ciudad Bolivar, at considerable expense, something they do not have to contend with now with the opening of the new marketing center."

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